CLAIMS

1.   A digital camera, comprising:

a housing;

a digital optical sensing apparatus mounted within said housing, said digital optical sensing apparatus sensing optical images;

a storage medium for storing digital optical images captured by said digital optical sensing apparatus;

an acoustic sensor capable of sensing human speech;

a speech reduction apparatus coupled to said acoustic sensor, said speech reduction apparatus converting human speech sensed by said acoustic sensor to a symbolic text form; and

a controller which stores said symbolic text form in said storage medium in a relationship associated with a captured digital image.

2.   The digital camera of claim 1, wherein said controller comprises a programmable processor executing a control program for controlling the operation of said digital camera.

3.   The digital camera of claim 2, wherein said speech reduction apparatus comprises a speech reduction algorithm embodied as a plurality of instructions executable on said programmable processor.

4.   The digital camera of claim 1, wherein said speech reduction apparatus converts said human speech sensed by said acoustic sensor to an intermediate symbolic form comprising a symbolic representation of phonemes, said intermediate symbolic form being subsequently reduced to natural language text by a separate apparatus.

5. A method of operating a digital camera, comprising the steps of:

capturing a digital image of an object of interest with optical sensing apparatus of said digital camera;

recording human speech of a user in said digital camera, said recording step being performed substantially contemporaneously with said step of capturing a digital image;

rendering said human speech in a symbolic text form using speech reduction apparatus within said digital camera; and

storing said symbolic text form in a relationship associated with said captured digital image.

6. The method of operating a digital camera of claim 5, wherein said step of rendering said human speech in a symbolic text form converts said human speech to an intermediate symbolic form comprising a symbolic representation of phonemes, said intermediate symbolic form being subsequently reduced to natural language text by an apparatus separate from said digital camera.

7. The method of operating a digital camera of claim 5, wherein said step of rendering said human speech in a symbolic text form is performed by a programmable processor executing a speech reduction program.

8. The method of operating a digital camera of claim 7, wherein said programmable processor further executes a control program for controlling the operation of said digital camera, and said step of rendering said human speech in a symbolic text form is performed by said programmable processor in the background when said control program is otherwise unoccupied.

9.   A program product for controlling the operation of a digital camera, said program product comprising a plurality of processor executable instructions recorded on signal-bearing media, wherein said instructions, when executed by at least one programmable processor within said digital camera, cause the camera to perform the steps of:

capturing a digital image of an object of interest with optical sensing apparatus of said digital camera;

recording human speech of a user in said digital camera, said recording step being performed substantially contemporaneously with said step of capturing a digital image;

rendering said human speech in a symbolic text form using speech reduction apparatus within said digital camera; and

storing said symbolic text form in a relationship associated with said captured digital image.

10.   The program product for controlling the operation of a digital camera of claim 9, wherein said step of rendering said human speech in a symbolic text form converts said human speech to an intermediate symbolic form comprising a symbolic representation of phonemes, said intermediate symbolic form being subsequently reduced to natural language text by an apparatus separate from said digital camera.

11.   A method of recording information with digital images, comprising the steps of:

    capturing at least one digital image of a respective object of interest with optical sensing apparatus of a digital camera;

    recording at least one segment of human speech of a user in said digital camera, each segment corresponding to a respective digital image, said recording step being performed substantially contemporaneously with said step of capturing the respective digital image;

    rendering said at least one segment human speech into at least one corresponding segment of symbolic text form using speech reduction apparatus within said digital camera;

    uploading said at least one digital image and said at least one segment of symbolic text to a digital image formatting apparatus; and

    formatting said at least one digital image and said at least one segment of symbolic text for viewing by a user using said digital image formatting apparatus, wherein each said segment of symbolic text is formatted for viewing in a human readable form associated with its corresponding digital image.

12.   The method of recording information with digital images of claim 11, wherein said step of rendering said at least one segment of human speech in a symbolic text form converts said human speech to an intermediate symbolic form comprising a symbolic representation of phonemes, and wherein said step of formatting said at least one digital image and said at least one segment of symbolic text for viewing comprises reducing said intermediate symbolic form to natural language text.

13.   The method of recording information with digital images of claim 11, wherein said digital image formatting apparatus is a general-purpose digital computer executing a digital image formatting program.

14. The method of recording information with digital images of claim 11, wherein said step of formatting said at least one digital image and said at least one segment of symbolic text comprises formatting for output on paper, wherein formatted text is printed on paper with a corresponding digital image.

15. The method of recording information with digital images of claim 11, wherein said step of formatting said at least one digital image and said at least one segment of symbolic text comprises formatting for viewing from an output screen of a digital device, wherein formatted text is displayed on said output screen with a corresponding digital image.

16. A program product for formatting data from a digital camera for output, said program product comprising a plurality of processor executable instructions recorded on signal-bearing media, wherein said instructions, when executed by at least one programmable processor of a digital formatting system, cause the digital formatting system to perform the steps of:

receiving at least one digital image and at least one segment of symbolic text from a digital camera apparatus, each said at least one segment of symbolic text representing a respective segment of human speech of a user of said digital camera and corresponding to a respective digital image, each said at least one segment of symbolic text being a rendering of said respective segment of human speech of a user into a symbolic text form; and

formatting said at least one digital image and said at least one segment of symbolic text for viewing by a user using said digital image formatting apparatus, wherein each said segment of symbolic text is formatted for viewing in a human readable form associated with its corresponding digital image.

17.   The program product for formatting data of claim 16, wherein said at least one segment symbolic text comprises human speech in an intermediate symbolic form comprising a symbolic representation of phonemes, and wherein said step of formatting said at least one digital image and said at least one segment of symbolic text for viewing comprises reducing said intermediate symbolic form to natural language text.

18.   The program product for formatting data of claim 16, wherein said step of formatting said at least one digital image and said at least one segment of symbolic text comprises formatting for output on paper, wherein formatted text is printed on paper with a corresponding digital image.

19.   The program product for formatting data of claim 16, wherein said step of formatting said at least one digital image and said at least one segment of symbolic text comprises formatting for viewing from an output screen of a digital device, wherein formatted text is displayed on said output screen with a corresponding digital image.